PRELIMINARY

27.03TL

HYBRID TELESCOPIC WHEEL LOADER

Venieri SPA

ELECTRIC MOTOR

Type		Permanent magnet synchronous
Supply voltage		51,2 V
Max power		30 kW - 40 HP
Rated power		12 kW - 16 HP
Max engine speed (rpm)		3.000
ECO mode engine speed (rpm)		1.600
Max torque	Nm	105

BATTERIES

Type	Lithium-ion, LiFePO4 technology (Lithium Iron Phosphate)
Supply voltage	51,2 V
Capacity	12,8 kW/h - 250 Ah
Standard charge time (50A - 380V)	6 hours
Fast charge time (100A - 380V)	3 hours
Continuous runtime (ECO mode)	1,5 hours

DIESEL ENGINE

3 cylinder in line engine, turbocharged, common-rail injection with electronic control, water cooled. Emissioned according to CE 97/68 - Stage V/Tier 4f

Type		Kohler KSD 1403-TC
Max power		18.9 kW - 25.7 HP
Max engine speed (rpm)		2.600
ECO mode engine speed (rpm)		2.200
Max torque	Nm	105
Bore	mm	81
Stroke	mm	90
Displacement	cm^3	1.391

ELECTRIC SYSTEM

Battery	12 Volt
Capacity	80 Ah - 680 A
Alternator	45 A
Reverse warning	Standard
Wiring according to	IP 67 - DIN 40050

TRANSMISSION

Electric transmission with automatic power regulation via an electric traction motor responsible for vehicle movement. Two forward/reverse speeds with electric control.

STD	*Forward*	*Reverse*
1st gear km/h	0÷7	0÷7
2nd gear km/h	0÷30	0÷30

Automatic 2nd gear selection optional.

AXLES

Two heavy-duty axles with planetary reduction hubs on each wheel.
All-wheel drive.
Rigid front axle. Oscillating rear axle with 12.5° articulation.
Transfer case on the rear axle transmitting drive to both front and rear axles via propeller shaft.
Proportional limited-slip differential on the front axle (optional on the rear axle).

BRAKES

Service brake: hydraulic drum brake on the front axle, acting on all four wheels.
Parking brake: mechanically operated, manually actuated, acting on the service brake.

TYRES

Standard	420/55 R17

STEERING

Servo assisted steering hydraulic **LOAD SENSING** system.

Total steering angle		72°
Inner tyres turning radius	mm	2.160
External tyres turning radius	mm	3.721
External bucket turning radius*	mm	4.033

** in transfer position*

HYDRAULIC CIRCUIT

Single gear pump with LOAD-SENSING priority valve dedicated to the steering circuit.
Modular 4-section control valve with main relief valve.
Double-acting cylinders.
Hydraulic oil cooler and full-flow return-line filter.
Single joystick control featuring 4-position lift, 3-position bucket operation, and push-button auxiliary control.

Max flow	lt/1'	70
Loader relief valve pressure	bar	200
Steering relief valve pressure	bar	140
Lift cylinders	mm	90x707
Bucket cylinders	mm	95x220

TELESCOPIC BOOM

Telescopic boom with Z-bar linkage and compensation integrated in the lifting cylinder to ensure parallelism.

- Anti-tipping device and safety block valves
- Internal boom extension cylinder
- Ride control and floating function on request

SERVICE CAPACITIES

Engine (including filter)	lt	5,37
Front axle	lt	3,8
Rear axle + gearbox	lt	4,1
Hydraulic circuit	lt	38
Brake circuit	lt	1
Fuel	lt	44
Water cooling	lt	7

TECHNICAL FEATURES

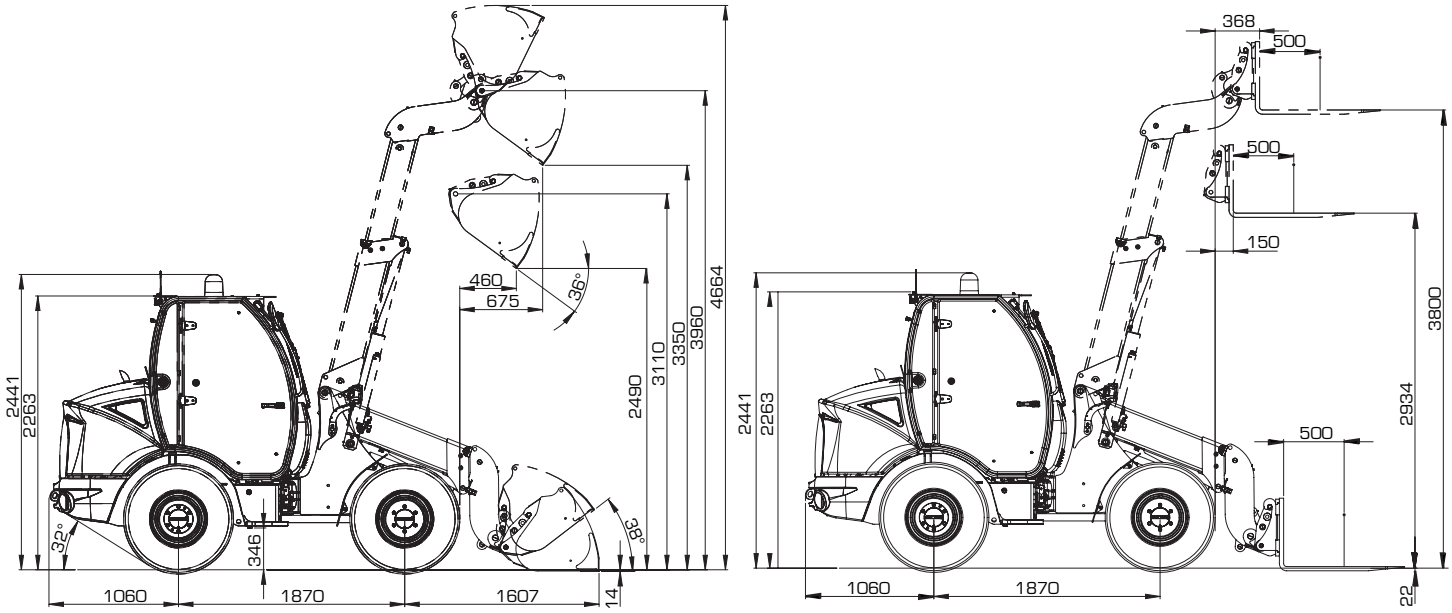
Standard bucket capacity	m^3	0,6
Bucket width	mm	1.600
Straight static tipping load	kg	2.100**
Full turned tipping load 36°	kg	1.800**
Hinge pin height (Retracted telescopic boom)	mm	3.110
Hinge pin height (Extended telescopic boom)	mm	3.960
Dump height at 36° (Retracted tele boom)	mm	2.490
Dump height at 36° (Extended tele boom)	mm	3.350
Dump distance at 36° (Retracted tele boom)	mm	460
Dump distance at 36° (Extended tele boom)	mm	675
Maximum lift height with forks (Extended tele boom)	mm	3.800
Breakout force	kg	2.000
Forks static tipping load - full turn	kg	1.400**
Payload EN474-3 (80%)*	kg	1.150**
Payload EN474-3 (60%)*	kg	900**

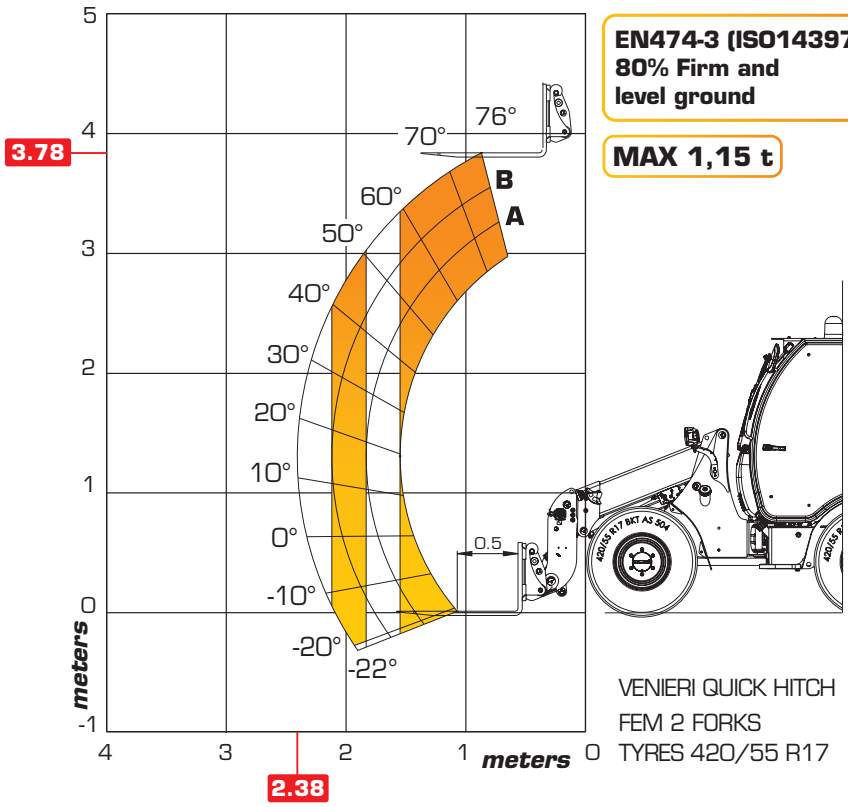
** With forks.*
*** Loads based on standard configuration without additional manual counterweight.*

DIMENSIONS AND WEIGHTS

Max lenght in transfer position	mm	4.490
Max width in transfer position	mm	1.600
Max height	mm	2.441
Track width	mm	1.090
Overall tyre width	mm	1.520
Ground clearance	mm	346
Wheel base	mm	1.870
Standard operating weight	kg	2.780
Max permissible weight	kg	/

Venieri 27.03TL HYBRID





EN474-3 (ISO14397)
80% Firm and level ground

MAX 1,15 t

VENIERI QUICK HITCH
FEM 2 FORKS
TYRES 420/55 R17

The illustrations on the present folder do not necessarily show the product standard version. Data and dimensions described in this folder are not binding.
Venieri reserves the right of carrying out possible changes at any time and without previous notice because of its policy of steady developement and improvement of the products.

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